

Solving Proportions Practice Problems

Determine if each of the following proportions are true or false:

1. $\frac{7}{8} = \frac{21}{24}$

2. $\frac{245}{310} = \frac{7}{9}$

3. $\frac{2.4}{4.8} = \frac{0.17}{0.34}$

4. $\frac{2.5}{20} = \frac{8}{64}$

Solve each proportion:

5. $\frac{9}{12} = \frac{x}{5}$

6. $\frac{1}{x} = \frac{2}{3}$

7. $\frac{10.08}{2.8} = \frac{0.504}{x}$

8. $\frac{x}{3.3} = \frac{6.6}{19.8}$

Solve each problem using a proportion:

9. On a 35-acre field, a farmer needs to use 120 lb of a chemical. If he applies the chemical at the same rate, how much will he need for a 245 acres farm?

10. If there are 17 g of solute in 30 ml of solution, how many grams of solute will be in 18 ml of solution?

11. An engine with displacement of 380 in^3 develops 212 hp. How many horsepower would be developed by a 318 in^3 engine of the same design?

12. A label reads: "Gantrisin, 1.5 g in 20 cm^3 ". How many cubic centimeters would you need to get 31.5 g of Gantrisin?

13. How much pure Lysol is needed to prepare 3200 ml of a Lysol solution containing 1 part Lysol and 15 parts water?

14. If 30 ml of solution is needed to prepare 45 slides for a lab test, how much solution is needed to prepare 54 slides?

15. A 7 % solution contains 7g per 100 ml of solution. How many milliliters of solution would you need to have 8.4g of solute?